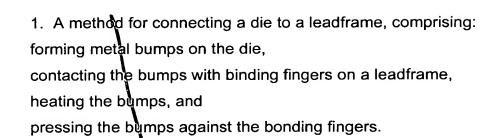
## **CLAIMS**

## What is claimed is:



- 2. The method of claim 1 wherein the step of forming the metal bumps comprises stud bumping.
- 3. The method of claim 1 wherein the step of forming the metal bumps comprises electroplating.
  - 4. The method of claim 1 wherein the metal bumps comprise gold.
- 5. The method of claim 1 wherein the step of heating the bumps comprises heating the die.
  - 6. The method of claim 1, further comprising supporting the bonding fingers on a substrate, and supporting the die by a press, wherein the step of pressing the bumps against the bonding fingers comprises

wherein the step of pressing the bumps against the bonding fingers comprises applying a force to move the die and the substrate toward one another.

7. The method of claim 1 wherein the heating step and the pressing step are carried out at a temperature and pressure sufficient to result in deformation of the bump material to an extent of between about 15 % and about 20 % of the original bump height.

- 8. The method of claim 7 wherein the metal bumps comprise gold, and the heating step comprises heating the bumps to a temperature in the range about 100 °C to about 400 °C, and the pressing step comprises applying a force equivalent to vertically loading in the range about 10 grams to 250 grams per bump.
- 9. The method of claim 1, further comprising the steps, prior to contacting the bumps with the binding fingers of the leadframe, of

supporting the leadframe on a substrate, and

dispensing a measured quantity of a fill material onto the substrate within the leadframe binding fingers.

- 10. The method of claim 9 wherein the fill material comprises an adhesive resin.
- 11. A method for forming a plurality of chip-in-leadframe packages, comprising providing a plurality of leadframes each comprising a set of bonding fingers, providing a plurality of dies each having a set of metal bumps formed thereon, positioning the leadframes onto a support,
- placing the dies onto the leadframes such that each set of bumps contacts a set of bonding fingers,

heating the bumps, and pressing the dies against the leadframes to compress the bumps onto the bonding fingers.

- 12. The method of claim 11 wherein the metal bumps comprise gold, and the heating step comprises heating the bumps to a temperature in the range about 100 °C to about 400 °C, and the pressing step comprises applying a force equivalent to vertically loading in the range about 10 grams to 250 grams per bump.
  - 13. The method of claim 11, further comprising the steps, prior to contacting the bumps with the binding fingers of the leadframe, of

supporting the leadframe on a substrate, and

dispensing a measured quantity of a fill material onto the substrate within each set of leadframe binding fingers.



- 14. The method of claim 11, further comprising the steps of singulating the chip-in-leadframe packages.
  - 15. A chip in-leadframe package made according to the method of claim 14.
- 16. The package of claim 15 wherein the die is situated cavity upward in relation to the set of bonding fingers.
- 17. The package of claim 15 wherein the die is situated cavity downward in relation to the set of bonding fingers.
  - 18. The package of claim 15 wherein the leads fan inwardly.
  - 19. The package of claim 15 wherein the leads fan outwardly.